

Application of: Tae-Kyung Yoo
Serial No.: 10/563,269
Amendment A

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior revisions, and listings, of claims in the application.

Listing of Claims:

1-8. (*Cancelled*)

9. (*New*) A method of manufacturing a nitride semiconductor light emitting device, the nitride semiconductor light emitting device including a plurality of nitride semiconductor layers and an electrode layer disposed on the plurality of the nitride semiconductor layers, the plurality of nitride semiconductor layers having an active layer that generates light through recombination of electrons and holes, and a p-type nitride semiconductor layer for supplying holes to the active layer, the method comprising the steps of:

 forming the p-type nitride semiconductor layer of the plurality of nitride semiconductor layers, without a subsequent annealing process, by using ammonia and hydrazine-based material as nitrogen precursor; and

 forming the electrode layer to be electrically in contact with the p-type nitride semiconductor layer.

10. (*New*) The method of claim 9, wherein the p-type nitride semiconductor layer contains gallium, and the molar flow ratio of hydrazine-based material/gallium is 1 to 1000.

11. (*New*) The method of claim 10, wherein the electrode layer is made of at least one selected from the group consisting of nickel, gold, silver, chrome, titanium, platinum, palladium,

Application of: Tae-Kyung Yoo

Serial No.: 10/563,269

Amendment A

rhodium, iridium, aluminum, tin, ITO, indium, tantalum, copper, cobalt, iron, ruthenium, zirconium, tungsten, lanthanum and molybdenum.

12. (New) The method of claim 11, wherein the molar flow ratio of hydrazine-based material/gallium is 1 to 500.

13. (New) The method of claim 12, wherein the electrode layer is made of ITO (Indium Tin Oxide).

14. (New) The method of claim 12, wherein the p-type nitride semiconductor layer is doped with magnesium (Mg) and the p-type nitride semiconductor layer is made of GaN.

15. (New) The method of claim 14, wherein the molar flow ratio of ammonia/gallium is below 5000, and N₂ and H₂ are used as carrier gas.

16. (New) The method of claim 15, wherein a radical of the hydrazine-based material contains at least one of CH₃ and NH₂.

17. (New) The method of claim 9, wherein, upon thermal decomposition, the hydrazine-based material generates a radical that is combined with a hydrogen radical to eliminate the hydrogen radical.